

ABSTRACT

In a wideband variable frequency voltage controlled oscillator, an LC resonance circuit determines an oscillation frequency based on an externally inputted voltage signal. A negative resistance generating circuit generates a signal having the oscillation frequency determined by the LC resonance circuit. A buffer circuit transfers the oscillation frequency generated by the negative resistance generating circuit to a load. A variable capacitor connecting circuit connects the negative resistance generating circuit and the buffer circuit to transfer the signal having the oscillation frequency from the negative resistance generating circuit to the buffer circuit.